



METHYL ISOCYANATE (MIC)

Agent Overview:	Methyl isocyanate, classified as a choking/pulmonary agent, is a water reactive liquid at room temperature. Methyl isocyanate is irritating and corrosive to the eyes, skin, and respiratory tract including asthma-like allergy. Exposure can result in cough, difficulty breathing, chest pain, excessive tearing (lacrimation), swelling of the eyes, and unconsciousness. Late stage exposure (next 24 to 72 hours) can include acute lung injury, cardiac arrest, and death. In 1984, the accidental release of 40 tons of methyl isocyanate (MIC) gas from a Union Carbide pesticide plant caused 20,000 deaths in Bhopal, India.
Lab Specimen Submittal:	Authorization by Dr. Jane Getchell, Director DPHL; Christina Pleasanton, Deputy Director DPHL; or Tara Lydick, Chemical Terrorism Coordinator.
Type of Specimens Necessary for Testing:	<u>Urine:</u> 25mL-50mL screw-cap container <u>Whole blood:</u> <ul style="list-style-type: none">- Three, 5 or 7 mL purple-top (EDTA) tubes (vacuum fill only) AND- One, 5 or 7 mL gray-top or green-top (vacuum fill only) AND- Two empty urine cups and two empty blood tubes for each lot # submitted.
Packaging Instructions:	<u>Urine:</u> freeze specimen upon collection and ship on dry ice; label specimens and package individually; wrap with absorbent material. <u>Whole blood:</u> place filled tubes in a shipping rack for stability, wrap the tubes in absorbent material, and secure with tape. Place the packaged tubes in a secondary unbreakable container. Specimens may be shipped cold but <i>must not</i> be frozen. <u>All:</u> wrap sample containers and layers with tamper-proof, waterproof forensic evidence tape initialed by collector, being careful not to cover the sample labels. Ship to DPHL as Biological Substance, Category B (Packing Instruction 650).
Receiving Specimens at DPHL:	Authorized specimens are received at the rear (loading dock) entrance of the laboratory. Submitters must present ID and have proper forms completed.
Handling of Specimens:	Chain of custody procedures must be followed. Urine specimens should be frozen upon collection.
Reporting Results:	Reference laboratory will notify DPHL as soon as possible. The Potential Exposure Call Log and Information form will provide information for notification of testing results outside of the DPHL.
Contact Information:	Jane Getchell, DrPH, Director DPHL, 302-223-1520 (24/7 coverage)